

EXHIBIT D

The musical score is for the song "The Music Is" by Burt Bacharach. It features three vocal parts: BRC orig., BRC final, and Domino. The lyrics are: "vi - nyl danc-ing to the beat the mu - sic is pri -". The score includes measures 24-28. The BRC orig. part starts at measure 24 and ends at measure 27. The BRC final part starts at measure 25 and ends at measure 28. The Domino part starts at measure 20 and ends at measure 22. The lyrics are: "vi - nyl danc-ing to the beat the mu - sic is pri -". The score includes measures 24-28. The BRC orig. part starts at measure 24 and ends at measure 27. The BRC final part starts at measure 25 and ends at measure 28. The Domino part starts at measure 20 and ends at measure 22. The lyrics are: "vi - nyl danc-ing to the beat the mu - sic is pri -".

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28 BRC orig. mal... D<sup>5</sup> F<sup>♯5</sup> G<sup>5</sup> E

Bar 30 given on p. 11 to line up all the second verse transcriptions for comparison

29

29 BRC final mal... D<sup>5</sup> F<sup>♯5</sup> G<sup>5</sup> E

Bar 31 given on p. 11 to line up all the second verse transcriptions for comparison

30

23 Domino skin\_tight ba-by come on Ooh, ooh, ooh, ooh Pull me like a bass drum spark-in' up a rhy - thm ba-by come

Bm A<sup>7(sus2)</sup> G<sup>9</sup> Em<sup>7</sup> Bm A<sup>7(sus2)</sup>

24 25 26 27

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The musical score is presented in three horizontal staves, each with a grand staff (treble and bass clef) and a key signature of one sharp (F#).

- BRC orig.:** The first staff shows a musical sketch with various note heads and stems, but no lyrics or specific chord markings are present.
- BRC final:** The second staff is similar to the first, showing a musical sketch without lyrics or chord markings.
- Domino:** The third staff contains the final musical notation with lyrics and chord markings.
  - Measures 28-32:** The lyrics are "on Ooh, ooh, ooh, ooh, Rock my world in - to the sun - light - make this dream - the best I've ev - er had".
  - Chord Markings:** G<sup>9</sup> (measure 29), Em (measure 30), Bm (measure 31), and A<sup>7</sup>(sus4) (measure 32).
  - Section Marker:** A box labeled "CHORUS" is placed above measure 29.



# EXHIBIT D

<p>BRC orig.</p>		<p>BRC final</p>		<p>Domino</p>	

Detailed description of musical notation: The image shows a comparison of three musical versions of a song segment, measures 33 through 37. The first version, 'BRC orig.', and the second, 'BRC final', are mostly empty staves with some initial notes. The third version, 'Domino', contains the full musical notation. The lyrics for the Domino version are: 'Dir - ty danc - ing in the moon- light - Take - me down - like I'm a dom - i - no Eve - ry sec -'. Chord markings below the Domino staff are G<sup>9</sup>, Em, Bm, A<sup>7</sup>(sus), and G<sup>9</sup>.

# EXHIBIT D

BRC orig.

BRC final

Domino

38 ond is a high-light Em

39 when we touch don't ev-cr let me go Em

40 A<sup>7(sus4)</sup>

41 Dir - ty danc G<sup>9</sup>

42 - ing in the moon-light Em

# EXHIBIT D

VERSE 2 A

30

It hits my hips be-fore my

BRC orig.

VERSE 2 A'

31

It hits my hips be-fore my

BRC final

VERSE 2 A1

43 44 45 46 47 48

Take me down like I'm a dom i-no

You got me los-ing my

Domino

Bm A7(sus4) D5 G5/D D(omit5) G5/D



# EXHIBIT D

The musical score is divided into three sections: BRC orig., BRC final, and Domino. Each section contains a vocal line and a piano accompaniment line. The lyrics are: "mind", "My feet are work-ing o-ver-time", and "Shoes slap-ping on the". The piano accompaniment includes chord markings: D<sup>5</sup>, F<sup>#5</sup>, G<sup>5</sup>, A<sup>5</sup>, E, G<sup>5</sup>/D, D(omit5), and A\*.

**BRC orig. (Bars 31-34):** The vocal line starts at bar 31 with the word "mind". The piano accompaniment features chords D<sup>5</sup>, F<sup>#5</sup>, G<sup>5</sup>, and A<sup>5</sup>. The vocal line continues with "My feet are work-ing o-ver-time" (bars 32-33) and "Shoes slap-ping on the" (bars 34-35).

**BRC final (Bars 32-35):** This section is a revised version of the BRC orig. section, maintaining the same structure and lyrics.

**Domino (Bars 49-52):** The vocal line starts at bar 49 with the word "mind". The piano accompaniment features chords D<sup>5</sup>, G<sup>5</sup>/D, and D(omit5). The vocal line continues with "my heart beats out of" (bars 50-51) and "I'm see-ing Hol-ly-wood" (bars 52-53).

\* Domino, bars 52-53 melody very close to BRC final, bars 10-11

# EXHIBIT D

The musical score is divided into three systems, each representing a different version of the song 'Let's Rock'. Each system consists of a vocal line (treble clef) and a guitar line (bass clef).

- System 1: BRC orig.**
  - Measures 35-38. The vocal line starts with 'floor' at measure 35, followed by 'Let's rock some more' at measure 36. The guitar line has chords D<sup>5</sup>, F#<sup>5</sup> G<sup>5</sup>, A<sup>5</sup>, and E.
  - Measure 37 is bracketed and labeled 'end of B'.
  - Measure 38 is the final measure of this system.
- System 2: BRC final**
  - Measures 36-38. The vocal line starts with 'floor' at measure 36, followed by 'Come on let's rock some more' at measure 37. The guitar line has chords D<sup>5</sup>, F#<sup>5</sup> G<sup>5</sup>, and E.
  - Measure 37 is bracketed and labeled 'loose variation of B'.
  - Measure 38 is the final measure of this system.
- System 3: Domino**
  - Measures 53-56. The vocal line starts with 'stars' at measure 53, followed by 'you strum me like a gui - tar' at measure 54, and 'I can' at measure 55. The guitar line has chords D<sup>5</sup>, G<sup>5</sup>/D, D (omitted), and G<sup>5</sup>/D.
  - Measure 54 is bracketed and labeled 'Start of A'.
  - Measure 55 is bracketed and labeled 'end of B varied'.
  - Measure 56 is the final measure of this system.



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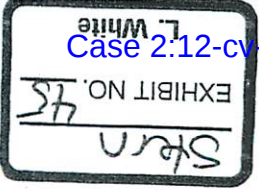


Figure 4: pickup bar  
"BRC Orig.": 1 3 6 6 6  
"BRC Final": 1 3 6 6 6  
"Domino": 6 1 6 1 6 1  
Figure 4: second bar  
6 5  
6 5 6 1  
1 6 5

Figure 3: pickup bar  
"BRC Orig.": 6 1 6 1 6 1 1  
"BRC Final": 6 1 6 1 6 1 1  
"Domino": 6 1 6 1 6 1  
Figure 3: second bar  
3  
3 #2 3  
3 2 3 5

Figure 2: pickup bar  
"BRC Orig.": 1 1 5 6 1 1  
"BRC Final": 1 1 3 6 1 1  
"Domino": 6 1 6 1 6 1  
Figure 2: second bar  
6 5  
6 5  
1 6 5

Figure 1: pickup bar  
"BRC Orig.": 6 1 6 1 6 1 1  
"BRC Final": 6 1 6 1 6 1 1  
"Domino": 6 1 6 1 6 1  
Figure 1: second bar  
3  
3 #2 3  
3 2 3 5

Exhibit I  
First Verse Comparison of Bright Red Chords, Domino, and Rush  
(all songs given in D major for ease of comparison)

Rush: Big Audio Dynamite (orig. key A major) - bar no. from album version

1 N.C. "A" D D(sus4) D D(sus4) Start of "A" varied end of B D D(sus4)

If I had my time a - gain I would do it all the same

Bright Red Chords: Loomis and the Lust Final Version (original key D major)

10 A1 Power chords D<sup>5</sup> F#<sup>5</sup> G<sup>5</sup> A B' end of B D<sup>5</sup> F#<sup>5</sup> G<sup>5</sup>

I put the need - le in the groove to a song that fits the mood

Domino: Jessie J (transposed to D, original key G major)

4 A1' G<sup>5</sup>/D D<sup>5</sup> G<sup>5</sup>/D Start of A1 end of B varied D(omits) G<sup>5</sup>/D

I'm feel - ing sex - y and free like rain is rain - ing on me

Rush

5 "A 2" D D(sus4) D D(sus4) Start of "A" varied C D D(sus4)

and not change a sin - gle thing e - ven when I was to blame

BRC

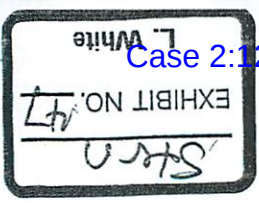
14 A' D<sup>5</sup> F#<sup>5</sup> G<sup>5</sup> A B1' C D<sup>5</sup> F#<sup>5</sup> G<sup>5</sup>

I watch the re - cord spin a - round in - to a wall of sound

Domino

8 A1' D<sup>5</sup> G<sup>5</sup>/D Start of A1 end of B varied D(omits)

You're like a shot of pure gold I think I'm 'bout to ex - plode



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Figure 3: pickup bar

"Rush": 1 6 1 6 1 5

"BRC Orig.": 6 1 6 1 6 1 1

"BRC Final": 6 1 6 1 6 1 1

"Domino": 6 1 6 1 6 1

Figure 3: second bar

(BARS 5-6) 3

(BARS 13-14) 3

(BARS 14-15) 3 #2 3

(BARS 8-9) 3 2 3 5

Figure 2: pickup bar

"Rush": 1 6 1 1 1 1

"BRC Orig.": 1 1 5 6 1 1

"BRC Final": 1 1 3 6 1 1

"Domino": 6 1 6 1 6 1

Figure 2: second bar

(BARS 3-4) 6 5

(BARS 11-12) 6 5

(BARS 12-13) 6 5

(BARS 6-7) 1 6 5

Figure 1: pickup bar

"Rush": 1 6 1 6 1 1

"BRC Orig.": 6 1 6 1 6 1 1

"BRC Final": 6 1 6 1 6 1 1

"Domino": 6 1 6 1 6 1

Figure 1: second bar

(BARS 1-2) 3

(BARS 9-10) 3

(BARS 10-11) 3 #2 3

(BARS 4-5) 3 2 3 5



5544865.1/44939-00001

Figure 4: pickup bar

"Rush": 1 6 1 6 1 1  
"BRC Orig.": 1 3 6 6 6  
"BRC Final": 1 3 6 6 6  
"Domino": 6 1 6 1 6 1

Figure 4: second bar

(BARS 7-8) 6 5 6 1  
6 5 (BARS 15-16)  
6 5 6 1 (BARS 16-17)  
1 6 5 (BARS 10-11)



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19 UMG Recordings, Inc. (erroneously sued as  
20 Universal Music Group, Inc.) and Universal  
21 Republic Records, a division of UMG Recordings,  
22 Inc.

23 UNITED STATES DISTRICT COURT  
24 CENTRAL DISTRICT OF CALIFORNIA  
25  
26  
27

28 WILL LOOMIS, an individual,  
Plaintiff,  
v.

JESSICA CORNISH, P/K/A JESSIE J,  
an individual; UNIVERSAL MUSIC  
GROUP, INC., a Delaware corporation;  
LAVA RECORDS LLC, a limited  
liability company; UNIVERSAL  
REPUBLIC RECORDINGS, business  
form unknown; and DOES 1 through 10,  
Defendants.

CASE NO. CV 12-5525-rswl(JEMx)

Hon. Ronald S.W. Lew  
DEFENDANTS' EXPERT  
DISCLOSURES PURSUANT TO  
RULE 26(A)(2)

Mitchell  
Silberberg &  
Knupp LLP

5537349.1

DEFENDANTS' EXPERT DISCLOSURES PURSUANT TO RULE 26(a)(2)

P580

Stern  
EXHIBIT NO. 49  
L. White



1 Pursuant to Federal Rule of Civil Procedure 26(a)(2), Defendants Jessica  
2 Cornish, UMG Recordings, Inc. (erroneously sued as Universal Music Group, Inc.)  
3 and Universal Republic Records, a division of UMG Recordings, Inc. (collectively,  
4 "Defendants") hereby make the following expert witness disclosure:

5 Dr. Lawrence Ferrara, Professor of Music and Director Emeritus of all studies  
6 in Music and the Performing Arts in NYU's Steinhardt School. Attached hereto are  
7 the materials required by Rule 26(a)(2)(B).

8 In accordance with Rule 26(a)(2), Defendants reserve their right to designate  
9 experts in rebuttal to experts disclosed by Plaintiff, and to supplement, amend and/or  
10 modify their expert disclosures prior to the time of trial. Defendants also reserve  
11 their right to call unlisted expert witness(es) for the purposes of impeachment, and  
12 designate as potential trial witnesses any experts designated by Plaintiff.  
13 Defendants further reserve the right to elicit the opinion testimony of percipient  
14 witnesses (non-designated experts) whose depositions will be taken in this action  
15 and who have special expertise in the applicable areas.

16  
17 Dated: September 11, 2013

CHRISTINE LEPERA  
JEFFREY M. MOVIT  
ELAINE K. KIM  
MITCHELL SILBERBERG & KNUPP LLP

18  
19  
20 By: 

21 Jeffrey M. Movit  
22 Attorneys for Defendants Jessica Cornish,  
23 UMG Recordings, Inc. (erroneously sued  
24 as Universal Music Group, Inc.) and  
25 Universal Republic Records, a division of  
26 UMG Recordings, Inc.  
27  
28

**PROOF OF SERVICE**

STATE OF NEW YORK, COUNTY OF New York

I am employed in the County of New York, State of New York, I am over the age of eighteen years and am not a party to this action; my business address is Mitchell Silberberg & Knupp LLP, 12 E. 49th St., New York, NY 10017.

On September 11, 2013, I served a copy of the foregoing document(s) described as **DEFENDANTS' EXPERT DISCLOSURES PURSUANT TO RULE 26(A)(2)** on the interested parties in this action at their last known address as set forth below by taking the action described below:

Edgar B. Pease III, Esq. Attorney for Plaintiff  
LAW OFFICES OF EDGAR B. PEASE Will Loomis  
III  
16255 Ventura Blvd., Suite 704, Encino,  
CA 91436  
Email: edgarpease@gmail.com

☒ **BY MAIL:** I placed the above-mentioned document(s) in sealed envelope(s) addressed as set forth above, and deposited each envelope in the mail at New York, New York. Each envelope was mailed with postage thereon fully prepaid.

☒ **BY ELECTRONIC MAIL:** I served the above-mentioned document(s) (other than the audio exhibits, which have been served today via hand delivery to the above address) electronically on the parties listed at the email addresses above and, to the best of my knowledge, the transmission was complete and without error in that I did not receive an electronic notification to the contrary.

I declare under penalty of perjury under the laws of the United States that the above is true and correct.

Executed on September 11, 2013, at New York, New York.

  
\_\_\_\_\_  
JEFFREY M. MOVIT



LAWRENCE FERRARA, Ph.D.  
d/b/a LAWRENCE FERRARA, INC.  
MUSIC ANALYSIS

Report Re: "Bright Red Chords" and "Domino"

INTRODUCTION AND SUMMARY

1. My title at New York University is Professor of Music and Director Emeritus of all studies in Music and the Performing Arts in NYU's Steinhardt School. I have written and co-written published books as well as articles (in peer reviewed journals) regarding music analysis, methodologies in music research, and other scholarly areas related to music. I sit on editorial boards of peer reviewed journals. I have provided analyses and opinions in connection with music copyright issues for more than 20 years. My *curriculum vitae* and Rule 26 disclosure are attached as Appendix C.
2. I have been asked to complete a comparative analysis of the musical and lyrical compositions in Plaintiff's song, "Bright Red Chords" as recorded by Loomis & the Lust (hereafter "BRC") and Defendants' song, "Domino" released in 2011 as recorded by Jessie J.
3. With respect to "BRC", I downloaded two almost identical versions from iTunes: the first version of "BRC" is track 1 on the 5-track EP *Nagasha* allegedly released in 2009 and the second version of "BRC" is track 3 on the 5-track EP *Space Camp* allegedly released in 2010. The musical and lyrical compositions embodied in the 2009 and 2010 releases of "BRC" appear to be identical except for the duration of their Introduction sections: the Introduction in the 2009 version of "BRC" consists of 2 bars of drums (a "bar" is a unit of musical time) followed by 4 bars with added guitar whereas the Introduction in the 2010 version of "BRC" consists of 4 bars of drums



followed by 8 bars with added guitar. The 2010 version of "BRC" includes all of the musical and lyrical expression in the 2009 version, but adds 6 bars to its Introduction as compared with the 2010 version. On that basis, all references to "BRC" in this report will be to the 2010 *Space Camp* EP release and all findings regarding the musical and lyrical expression therein fully obtains with respect to the 2009 version with the understanding that the duration of the Introduction in the 2010 version is 6 bars longer than that in the 2009 version.<sup>1</sup>

4. I downloaded the "single" and album releases of Defendants' "Domino," both released in 2011. "Domino" is track 14 on the Jessie J album, *Who Are You*. The "single" and album releases of "Domino" appear to be identical. On that basis, all references to "Domino" in this report will be to both the "single" and album releases.

5. The purpose of my analysis is to offer my professional opinion as to whether or not any similarities between "BRC" and "Domino" represent copying, and whether or not any similarities represent pre-existing expression, i.e., expression that existed prior to "BRC".

6. On the basis of my analysis, it is my opinion that "BRC" and "Domino" do not share any unique or significant musical and/or lyrical expression similarities, individually or in combination. My analysis finds no support for a claim that the creators of "Domino" copied any musical or lyrical expression from "BRC". On the basis of a preliminary search for "prior art" (i.e., songs that were released prior to 2008), I found four songs that, in the aggregate, establish that the similarity in the Verse melodies in "BRC" and "Domino" represents expression that existed prior to 2008 and was thereby available to the writers of "BRC" and "Domino". Additionally, Max Martin co-wrote

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<sup>1</sup> I received a copy of the 2008 U. S. Copyright Office Deposit Copy of "BRC" from counsel for Jessie J. The deposit copy consists of lyrics to three songs of which "BRC" is one, and a CD marked Pau 3-479-101 with three tracks, track 3 of which is an earlier version of "BRC". I have used the 2010 release version of "BRC" in this report. Appendix A attached to this report consists of a transcription of the vocal melodies and harmonies in the deposit copy of "BRC" as well as a summary of the main differences between the deposit copy of "BRC" and the 2009 and 2010 release versions of "BRC". The conclusions in my report regarding "BRC" apply equally to the deposit copy, the 2009 and 2010 released versions of "BRC", and the video version of "BRC" discussed in Appendix D attached hereto.

"When You're Looking Like That" (released in 2000), and Max Martin and Lukasz Gottwald (co-writers of "Domino") co-wrote "I Don't Think So" (released in 2006) which incorporate melodic expression that is similar to the Verse melodies in "BRC" and "Domino". Analysis of all of these prior art songs firmly supports my findings that (1) the similar expression in the Verse melodies in "BRC" and "Domino" was created independently by the writers of "Domino" and not copied from "BRC" and (2) the similarity between "BRC" and "Domino" represents pre-existing expression.

7. I have also been asked to review an undated and unsigned report which I understand is written by Dr. David Stern, hereafter the Stern report. The Stern report, identified as "LOOMIS 003212" through "LOOMIS 003215" finds: "It is only in the verses where the musical ideas coincide." I agree that the only relevant similarities are in the Verse sections in "BRC" and "Domino." However, the Stern report fails to acknowledge that the similarity in the Verse melodies in "BRC" and "Domino" is found in music that pre-dates the 2008 copyright of "BRC".

### ANALYSIS

8. A musical composition is composed of certain distinct and identifiable elements that can be analyzed separately, and in combination. When analyzing two compositions in order to form an opinion as to whether one copied the other, such as in music copyright infringement claims, some elements are more fundamental to determining similarities or differences than others, namely: (1) structure; (2) harmony (which includes chord progressions); (3) rhythm; and (4) melody, and when present, (5) lyrics.<sup>2</sup> On the other hand, similarities or differences in the key (e.g., if two compositions are in the same key or in different keys), tempo (i.e., how fast or slow), meter (e.g., 4/4 time), instrumentation (e.g., the use of guitars, drums, synthesizers, etc.), and style or genre (e.g., hip hop, country, etc.) are relevant but less significant insofar as they

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<sup>2</sup> For example, Ronald S. Rosen writes: "Thus, from the copyright perspective (and in the view of many musical professionals)...the basic elements of music are: melody, harmony, rhythm, and form/structure." (Ronald S. Rosen, *Music and Copyright*, Oxford University Press, 2008, p. 156) In addition and as cited in Rosen (footnote 19 on page 156): "In *Tisi v. Patrick*, both experts were in agreement "that the elements to be considered on the question of similarity between [the two songs] were structure, melody, harmony and rhythm." 97 F.Supp.2d 539,543 (S.D.N.Y.2000)."



represent musical building blocks and/or commonplace practices (including performance practices such as 'tempo') used in countless musical compositions. While there is no unalterable combination of musical elements to consider in order to form an opinion as to whether or not one composition was copied by another, brief definitions of the following fundamental elements in a musical composition are presented immediately below.

(a) **Structure** is the organization of musical units or musical groups, often dictated by the development of the melody and/or lyrics. The larger portions or sections of songs are generally referred to as Verses and Choruses. The material within Verses and Choruses consists of phrases.

(b) **Harmony** refers to "The combining of notes simultaneously, to produce chords, and successively, to produce chord progressions."<sup>3</sup> A "triad" is a particular type of chord consisting of three pitches – the "root" or name of the chord and pitches that are respectively a third and a fifth above the root -- built on intervals of a third. (An interval names the number of tones between two pitches.) A sequence of chords is referred to as a chord progression.

(c) **Rhythm** is the organization of the time values of sounds and silences and can also refer to the overall rhythmic flow and feel.

(d) **Melody** is a single line of music that consists primarily of successive pitch sequences and their rhythmic durations within a melodic phrase structure. Pitch is the specific high or low placement of a musical sound, often within a musical scale.

(e) **Lyrics** are the words that are sung or spoken in a song.

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<sup>3</sup> *The New Grove Dictionary of Music and Musicians*, Second Edition, Oxford University Press, 2001, Volume 10, p. 858.



9. The following materials were used in my analysis: (1) the sound recording in the 2008 deposit copy of "BRC" attached to this report as track 1 on **Audio Exhibit 1**; (2) the "BRC" sound recording on the 2009 *Nagasha* EP attached to this report as track 2 on **Audio Exhibit 1**; (3) the "BRC" sound recording on the 2010 *Space Camp* EP attached to this report as track 3 on **Audio Exhibit 1**; (4) the "Domino" sound recording on the 2011 *Who Are You* album attached to this report as track 4 on **Audio Exhibit 1**; (5) the "Domino" sound recording released as a "single" in 2011 attached to this report as track 5 on **Audio Exhibit 1**; (6) sound recordings of related songs attached on audio exhibits; and (7) transcriptions (i.e., written notation of recorded music) presented as musical examples in the body of this report and attached as visual exhibits. (I attached a list of all of the tracks attached to this report in audio exhibits in Appendix B.)

10. I compared "BRC" and "Domino" by using this overall methodology: (1) initial comparative analysis of the musical and lyrical compositions in "BRC" and "Domino" in their entirety, (2) comparative analysis of each of their component elements individually and in combination, (3) comparative analysis of prior art, i.e., compositions created prior to "BRC's" 2008 copyright, and (4) comparative analysis of "BRC" and "Domino" in their entirety within the context of the analysis of their component parts and prior art.

### **STRUCTURE**

11. I have found no significant structural similarities between "BRC" and "Domino". There are no similarities that suggest that any structural practices in "Domino" were copied from "BRC".

12. A structural chart provides a map of the structural sections in a musical composition, including the structural context for melodic phrase structures. The charts of the respective structures in "BRC" and "Domino" presented immediately below include the commencement times (within 1 second) and the number of bars for each structural section.

"BRC": Structural Chart

0:00	Introduction	(12 bars)
0:24	Verse 1	(8 bars)
0:40	Chorus 1	(8 bars)
0:56	Intro material	(4 bars)
1:04	Verse 2	(8 bars)
1:20	Chorus 2	(8 bars)
1:36	Bridge	(4 bars)
1:44	Guitar Solo	(8 bars)
2:00	Chorus 3	(12 bars)
2:24	Outro	(8 bars)
(Ends approximately at 2:44)		

"Domino": Structural Chart

0:00	Introduction	(4 bars)
0:08	Verse 1	(16 bars)
0:38	Pre-Chorus 1	(8 bars)
0:53	Chorus 1	(16 bars)
1:23	Intro material	(4 bars)
1:31	Verse 2	(16 bars)
2:01	Pre-Chorus 2	(8 bars)
2:16	Chorus 2	(16 bars)
2:47	Bridge	(16 bars)
3:17	Chorus 3	(16 bars)
(Ends approximately at 3:50)		

13. As per my analysis illustrated in the structural chart immediately above, "BRC" and "Domino" incorporate generic structural building blocks in music through the use of Introduction, Verse, Chorus, and Bridge sections. Both also re-introduce material from the Introduction immediately prior to Verse 2, a commonplace musical idea. Given the widespread use of these structural building blocks in songs in many genres of popular music, it is hardly surprising that "BRC" and "Domino" use these generic structural forms. Thus, their use in "BRC" and "Domino" is not unique or suggestive of copying.

14. The aggregate of structural *differences* between "BRC" and "Domino" is substantial. For example:

- "Domino" includes two Pre-Chorus sections, but "BRC" does not contain any Pre-Chorus sections;
- There is an 8-bar guitar solo in "BRC", but there is no comparable or corresponding guitar solo in "Domino";
- There is an Outro (or ending) section in "BRC", but there is no Outro section in "Domino";

- The Introduction in "BRC" is 12 bars in duration which is three times longer than the 4-bar Introduction in "Domino";
- Each Verse in "Domino" is 16 bars in duration which is two times longer than the duration of each 8-bar Verse in "BRC";
- Each Chorus in "Domino" is 16 bars in duration which is two times longer than the 8-bar duration of Chorus 1 and Chorus 2 in "BRC";
- All of the Chorus sections in "Domino" are consistently 16 bars in duration, but the Chorus sections in "BRC" are not consistent in duration because Chorus 3 (which is 12 bars in duration) is 50% longer in duration than Chorus 1 or Chorus 2 (at 8 bars each) in "BRC"; and
- The Bridge in "Domino" is 16 bars in duration which is four times longer than the 4-bar Bridge in "Domino";

15. In summary, on the basis of my analysis I found that there are no unique or significant structural similarities between "BRC" and "Domino", but there are substantial structural differences. There are no similarities that suggest that any structural practices in "Domino" were copied from "BRC".

## HARMONY

16. "BRC" is recorded in the key of D major. "Domino" is recorded in the key of G major. Countless songs in multiple popular genres are recorded in major keys. A major key represents a fundamental musical building block.

17. I prepared and attached a transcription of the melodies (which includes pitch sequences and rhythmic durations) and harmonies (identified as chord symbols) in the entirety of "BRC" as **Visual Exhibit A**. A transcription of the melodies and harmonies in the entirety of "Domino" is attached as **Visual Exhibit B**. In keeping with musicological practices and in order to facilitate a comparative analysis, insofar as "Domino" is recorded in a different key (G major) as compared with "BRC" (D major), a transcription of the melodies and harmonies for the entirety of "Domino" is presented in the key of D major and attached as **Visual Exhibit C** so that "BRC" and "Domino" can



be compared in the same key.

18. On the basis of my analysis, I found that there are no significant harmonic similarities between "BRC" and "Domino". The chord progressions in "BRC" and "Domino" are notably different. Analysis of the harmonies in the Verses (the only section at issue in "BRC" and "Domino") is presented in Paragraph 37 below.

#### **RHYTHM**

19. The meter in "BRC" and "Domino" is 4/4, called "common time." 4/4 meter is the most commonly used meter in popular music and represents a fundamental musical building block.

20. The performance speed or "tempo" of "BRC" is 120 BPM (beats per minute). The performance speed or tempo of "Domino" is faster at 127 BPM.

21. There are no significant rhythmic similarities in the instrumental music in "BRC" and "Domino". The rhythms in the instrumental parts are very different.

22. The only rhythmic similarity in the vocal melodies is found in the Verse sections in "BRC" and "Domino". The rhythms in the vocal melodies in the sections outside of the Verses in "BRC" and "Domino" are very different. An analysis of the melodic rhythm in the Verse sections in "BRC" and "Domino" is presented in the next section of this report, namely, the analysis of "Melody".

#### **MELODY**

23. As defined in Paragraph 8d above, 'melody' is a single line of music that consists primarily of successive pitch sequences and their rhythmic durations within a melodic phrase structure.

24. The melodies in the instrumental parts in "BRC" are substantially different from the melodies in the instrumental parts in "Domino". I found no significant

similarities in the melodies in the instrumental parts in "BRC" and "Domino".

25. The only melodic similarity in the vocal melodies is found in the Verse sections in "BRC" and "Domino". The vocal melodies in the sections outside of the Verses in "BRC" and "Domino" are very different.

26. As analyzed above, the Verses in "BRC" are 8 bars in duration, but the Verses in "Domino" are 16 bars in duration. In Musical Example 1 immediately below, the vocal melody in the entire Verse 1 in "BRC" is placed over the vocal melody in bars 1-8 in Verse 1 in "Domino". As noted above, in keeping with musicological practices, the melodies in "Domino" and "BRC" are transcribed in the same key (D major) to facilitate the comparison.

#### MUSICAL EXAMPLE 1

Verse 1 in "BRC" placed over bars 1-8 in Verse 1 in "Domino" (in D major)

"Bright Red Chords" (2010) 0:22

I put the needle in the groove

"Domino" 0:06

I'm feeling sexy and free

3

to a song that fits the mood I watch the record spin a -

like glitter's raining on me You're like a shot of pure

6

round in - to a wall of sound yeah

gold I think I'm 'bout to explode

27. There is a similarity in the melodic phrase structures in Verse 1 in "BRC" and the first 8 bars in Verse 1 in "Domino." Therein, each melodic phrase is two bars in duration consisting of a pickup<sup>4</sup> in the first bar, and ending in the second bar. There are four, 2-bar phrases in Verse 1 in "BRC" and in the first 8 bars in Verse 1 in "Domino" as transcribed in Musical Example 1 above. Nonetheless, a Verse that consists of four, 2-bar melodic phrases is a commonplace musical idea found in songs in many genres in and out of popular music.

28. Now turning to the *pitch sequences*, similarities and differences in melodic pitch sequences in the Verses in "BRC" and "Domino" can be identified using scale degrees. In the key of D major, there are seven scale degrees, each corresponding to the letter name of a pitch as charted below.

<u>Scale degrees</u>	<u>Letter names in D major</u>
1	D
2	E
3	F sharp
4	G
5	A
6	B
7	C sharp

29. The pitch sequences in each corresponding 2-bar melodic phrase in Verse 1 in "BRC" and in bars 1-8 in Verse 1 in "Domino" are charted immediately below.

	<u>Phrase 1: pickup bar</u>	<u>Phrase 1: second bar</u>
"BRC":	6 1 6 1 6 1 1	3 2 3
"Domino":	6 1 6 1 6 1	3 2 3 5

<sup>4</sup> A "pickup" is one or more notes preceding a strong beat (e.g., the first beat).



30. As charted above, the corresponding Phrase 1 and Phrase 3 in the Verses in "BRC" and "Domino" embody the most similarity in pitch sequences. The similarity consists of oscillating pitches on scale degrees 6 and 1 in the pickup bar, and scale degrees 3-2-3 at the beginning of the second bar. Nonetheless, there is an additional scale degree "1" in the pickup bar in Phrase 1 and in Phrase 3 in "BRC" as compared with the pickup bar in Phrase 1 and in Phrase 3 in "Domino". Moreover, the second bar in Phrase 1 and in Phrase 3 in "Domino" ends with scale degree 5, which is different from the second bar in Phrase 1 and in Phrase 3 in "BRC" which ends with scale degree 3.

31. There is less similarity in the pitch sequences in the corresponding melodies in Phrase 2 and Phrase 4 in the Verses in "BRC" and "Domino." While the oscillation between pitches on scale degrees 6 and 1 continues in Phrases 2 and 4 in "Domino", that 6-1 scale degree oscillation does not continue in Phrases 2 and 4 in "BRC." Moreover, the pickup bars in Phrases 2 and 4 in "BRC" are marked by the use of scale degree 3 (in Phrase 2) and scale degree b3 (i.e., "flatted 3" in Phrase 4), but there is no scale degree 3 or b3 in the *pickup bars* in the corresponding Phrases 2 and 4 in "Domino".

Phrase 2: pickup bar	Phrase 2: pickup bar
"BRC": 1 1 3 6 1 1 6 5 1 6 5	"BRC": 1 1 3 6 1 1 6 1 6 1 6 1 6 1 6 5
Phrase 3: second bar	Phrase 3: pickup bar
"BRC": 6 1 6 1 6 1 1 3 2 3 3 2 3 5	"Domino": 6 1 6 1 6 1 6 1 6 1 6 1 3 2 3 5
Phrase 4: second bar	Phrase 4: pickup bar
"BRC": 1 b3 6 6 6 6 5 6 1 1 6 5	"Domino": 1 b3 6 6 6 6 1 6 1 6 1 1 6 5

32. I now turn to an analysis of the melodic *rhythm*, i.e., the rhythmic durations and metrical placement within the bars, in the corresponding 2-bar melodic phrases in Verse 1 in "BRC" and bars 1-8 in Verse 1 in "Domino". As illustrated in Musical Example 1 above, the corresponding Phrases 1 and 3 in the Verses in "BRC" and "Domino" embody some similarity in melodic rhythm. The pickup notes begin on the second half of beat 1 (and move to scale degree 3 on the first beat of bar 2) in Phrases 1 and 3 in Verse 1 in "BRC" and in bars 1-8 in "Domino". Nonetheless, the melodic rhythms are not nearly identical. For example, the pickup bar in Phrases 1 and 3 in "BRC" consists of 7 eighth notes, but the pickup bar in Phrases 1 and 3 in "Domino" consists of 5 eighth notes followed by a quarter note. There are no quarter notes in the pickup bars in Phrases 1 and 3 in "BRC". Moreover, the melodic rhythms in bar 2 in Phrases 1 and 3 in "BRC" and "Domino" are notably different as charted immediately below.

Phrases 1 and 3, bar 2: melodic rhythm

"BRC": sixteenth-sixteenth-eighth

"Domino": eighth-sixteenth-sixteenth-quarter

33. There is even less similarity in the melodic rhythm in Phrases 2 and 4 in Verse 1 in "BRC" and in bars 1-8 in Verse 1 in "Domino". First, with respect to Phrase 2, the pickup notes in Phrase 2 in "BRC" start on beat 2, but the pickup notes in Phrase 2 in "Domino" start on the second half of beat 1. Moreover, there are 6 eighth notes in the pickup bar in Phrase 2 in "BRC", but there are 5 eighth notes and 1 quarter note in the pickup bar in Phrase 2 in "Domino." Additionally, bar 2 in Phrase 2 in "BRC" consists of 2 *eighth* notes, but bar 2 in Phrase 2 in "Domino" consists of two *sixteenth* notes followed by 1 eighth note.

34. Now moving to Phrase 4, the pickup notes in Phrase 4 in "BRC" start on beat 2, but the pickup notes start on the second half of beat 1 in "Domino." The melodic rhythm in the pickup bar in "BRC" consists of 1 quarter note followed by 4 eighth notes, but the corresponding pickup bar in "Domino" consists of 5 eighth notes followed by 1



quarter note. Moreover, bar 2 in Phrase 4 in "BRC" consists of 4 *eighth* notes, but bar 2 in Phrase 4 in "Domino" consists of 2 *sixteenth* notes followed by 1 eighth note.

35. The *melodic development* is different in Verse 1 in "BRC" and bars 1-8 in "Domino". As illustrated in Musical Example 1 above, within "BRC", Phrases 2 and 4 represent a significant departure from Phrases 1 and 3 with the termination of the oscillation of scale degrees 6 and 1 that marks the pickup bars in Phrases 1 and 3. By way of substantial difference, there is no comparable development of the melodic phrases in bars 1-8 in Verse 1 in "Domino". The pickup bars in every melodic phrase are identical within "Domino". This is substantially different in the development of the pickup bars in "BRC": there is a dramatic change marked by (1) pitch sequences with the use of scale degree "3" or "b3" on the strong beat 3, and (2) the use of a quarter beat rest (*i.e.*, silence) instead of an eighth beat rest before the pickup notes begin in Phrases 2 and 4 in "BRC". No such change or development occurs in the pickup bars in Phrases 2 and 4 in "Domino". Moreover, the melody in bar 2 in Phrase 2 in "BRC" is substantially different from the melody in bar 2 in Phrase 4 in "BRC" in pitch sequence, melodic contour, and melodic rhythm. By way of difference, there is no melodic development between Phrase 2 and Phrase 4 in "Domino", *i.e.*, bar 2 in Phrase 2 and Phrase 4 in "Domino" is the same, not dramatically changed as in "BRC".

36. The melodic development in Verse 1 in "Domino" is even more substantially different from that in Verse 1 in "BRC" than already established in Paragraph 35 above because bars 9-16 in "Domino" (which have no corresponding bars in the 8-bar Verse 1 in "BRC") are marked by a significant development of the melody, particularly in bars 9-14 therein. This substantial melodic development in bars 9-14 in Verse 1 in "Domino" is illustrated in Musical Example 2 below. The melody in these bars in the second half of Verse 1 in "Domino" is greatly changed from the melody in the first half of Verse 1 in "Domino" (underscoring the difference in melodic development from "BRC"). Moreover, the melody in these bars in the second half of Verse 1 in "Domino" is substantially different from the melody in Verse 1 in "BRC": the pitch sequences, melodic rhythms and phrase structures are very different.



## MUSICAL EXAMPLE 2

Verse 1 in "BRC" placed over bars 9-16 in Verse 1 in "Domino" (in D major)

The musical notation shows two staves. The top staff is for "Bright Red Chords" (2010) 0:22, and the bottom staff is for "Domino" 0:22. Both are in D major (one sharp). The lyrics are: "I put the needle in the groove", "I can taste the tension like a cloud of", "to a song that fits the mood", "I watch the record spin a", "smoke in the air, now I'm breathing like I'm running 'cause you're taking me there Don't you know", "round in to a wall of sound yeah", and "You spin me out of control". Chord symbols are placed above the notes: D5, F#5, G5, A5, D5, D(sus4), D, D(sus4), D5, F#5, G5, E5, D5, D(sus4), D, D(sus4).

37. The harmonies in the guitar and bass guitar parts that play simultaneously with the vocal melodies in Verse 1 and Verse 2 in "BRC" and "Domino" are very different. The harmonies in Verse 1 in "BRC" do not change in Verse 2 as illustrated in **Visual Exhibit A** attached to this report. The harmonies in Verse 1 in "Domino" do not change in Verse 2 as illustrated in **Visual Exhibits A and B**. Therefore, the chord symbols in Musical Examples 1 and 2 above represent the harmonies in both Verses in "BRC" and "Domino." The substantial harmonic differences in the Verses in "BRC" and "Domino" are illustrated by the chord symbols in Musical Examples 1 and 2 above. The chord progression in the Verses in "BRC" is D5 F#5 G5 A5 D5 F#5 G5 E5. By way of substantial difference, the chord progression in the Verses in "Domino" is D5 D(sus4) D D(sus4). Thus, while the chord progression in Verse 1 in "Domino" is marked by slight chord changes within continuous "D" chords with the pitch "d" in the bass, the

chord progression in "BRC" is marked by the movement of F#5 to G5 A5 followed by a leap down to D5 and mirrored in the bass notes, which is substantially different from the chord progression and bass notes in the Verse in "Domino." Moreover, the harmonic rhythm (i.e., the rate of change in the chords) is very different in the Verses in "BRC" and "Domino" with up to 4 chords per bar in "BRC" but only up to 2 chords per bar in "Domino".

38. The rhythms that are played by the guitar in Verse 1 in "BRC" and "Domino" are very different. Additionally, the drum part in bars 1-8 in Verse 1 in "Domino" *only* includes the bass (kick) drum playing quarter notes. By way of difference, the drum/percussion part in Verse 1 in "BRC" includes (1) eighth notes played on a hi-hat cymbal, (2) quarter notes played on a cowbell, and (3) snare drum iterations on beats 2 and 4.

39. Thus, the aggregate of rhythms and harmonies in the instrumental parts that play along with the Verse vocal melodies creates a very different overall compositional context for any similarity in the Verse vocal melodies in "BRC" and "Domino".

40. The similarities and differences between Verse 1 in "BRC" and Verse 1 in "Domino" analyzed above are largely, but not wholly, found in Verse 2 in "BRC" and Verse 2 in "Domino". Some of the melodic rhythms and pitch sequences are changed in Verse 2 as compared with Verse 1 in each song. Nonetheless, the overall balance of similarities and differences between Verse 1 in "BRC" and Verse 1 in "Domino" is largely found in the respective Verse 2 in each song. On the basis of my transcriptions and analysis, I found that the melodies in all of the Chorus, Bridge, and Outro sections of "BRC" are substantially different from any expression in "Domino".

## LYRICS

41. On the basis of my analysis, I did not find any significant similarities in the lyrics in "BRC" and "Domino". The lyrical narratives and subject matters in "BRC" and